Before the
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	**§**	**Rulemaking Docket #**
	§	
Amendment of the Commission's Amateur Radio	**§**	**RM - 11829**
Rules… Adding A Tyro License Class.. (and other purposes)	**§**	

COMMENTS OF JAMES E. DALLAS, AD5NL
OPPOSING IN PART AND SUPPORTING IN PART THE PETITION OF GARY A. HAMPTON

To the Commission:

I submit these comments today in partial opposition to the "PETITION FOR RULE MAKING" filed August 14, 2017 by Mr. Gary A. Hampton, AD0WU. I am specifically opposed to the main points of his proposal creating a new license class and reallocating the 70cm amateur band. But I am also sympathetic to some of the concerns that motivated it. In my comments, I will articulate and justify specific points of contention and propose alternatives.

I. BIOGRAPHICAL STATEMENT AND STATEMENT OF INTEREST

I am a licensed amateur radio operator (AD5NL, formerly KC5WXX). I was first licensed as a Technician class operator in 1996 and have maintained my license continually since that time, as well as upgrading to Technician Plus, General and Extra Class. I am also a GMRS licensee (WQXI844).

In addition to my experience as a radio operator, I also am an Information Technology professional (currently working as a database administrator at Vanderbilt University Medical Center in Nashville, Tennessee) and a non-practicing attorney (inactive Texas Bar No. 24059644). I am a graduate of the University of Texas at Austin and the University of Houston Law Center. I submit these solely comments on my own behalf and do not represent the interests of my employers or any clients.

II. SPECIFIC POINTS OF CONTENTION WITH MR. HAMPTON'S PETITION

A. Objections to the Proposed Tyro Class License

1. There is No Need for an Amateur License Class Lower than Technician

I object to the idea to that we need a class of license lower than Technician. The technical knowledge required to obtain a Technician exam is already quite rudimentary (I was licensed at age 14; I am aware of licensed hams who were much younger than that). Furthermore, the exam is already multiple choice and the answers are all published. The existing Technician Class exam is largely an exercise in self-discipline and memorization as well as application of a few basic concepts involving third-grade arithmetic.

Furthermore, the General Mobile Radio Service is already an adequate alternative for anyone who wants access to UHF radio communication without sitting before an amateur licensing exam.

2. The Proposes Licensing Process and Mentorship Model are Flawed

I object to the process proposed by Mr. Hampton for his proposed Tyro class. An online application with a few extra questions seems ripe for abuse; taking an exam before a VEC in a public setting provides a check against flagrant cheating that an online experience cannot.

Furthermore, Mr. Hampton does not propose a mechanism for validating the identity of the Ham mentor; how would the FCC have adequate assurance that the mentor listed on the Tyro's application be in a *bona fide* mentor-mentee relationship with the applicant? Either the Ham would need to register himself with the FCC (adding an additional level of bureaucracy to the process) or the FCC would have to rely on an "honor system," which would very quickly prove unenforceable.

Finally, current rules provide a mechanism for Ham "Elmers" to mentor unlicensed persons that is superior to the model proposed by Mr. Hampton. Non-hams are permitted (as third-parties) to transmit and communicate with other amateur stations under 47 C.F.R. § 97.115(b)(1) (stating that third parties may participate in stating the message so long as the control operator is present and continuously monitoring and supervising). The current rules guarantee that a licensed Ham be actively supervising the mentee, whereas Mr. Hampton's proposal does not.

3. Enforcing an Age Requirement Is Impractical and Raises Constitutional Questions

I object to the proposed minimum age of 11 years for Tyro operators, for both practical and legal reasons. On a practical level, adding an age requirement would necessitate validation on the part of the FCC, potentially including scrutinizing the applicant's birth certificate or other official records. Shifting that burden to the proctor just means shifting the Commission's attention to validating the identity of the proctor/mentor (which raises its own problems, as noted above).

Furthermore, there is currently no age requirement for the Amateur Service; it seems rather backward to apply one solely for the "lowest" class of operator. Not to mention the absurdity that it would be permissible under Mr. Hampton's proposal for a 9-year old Technician class licensee to be the mentor for a 45-year old Tyro applicant.

On a legal level, adding an age requirement raises potential issues relating to the Fifth Amendment's equal protection guaranty, Cf. *Bolling v. Sharpe,* 347 U.S. 497 (1954). Although the standard of review for classifications based on age is merely the "Rational Basis" test, I would advise the Commission that it ought to carefully gather facts that would allow it to justify why age 11 would be a suitable cutoff, prior to adopting any rule containing a minimum age requirement. As it currently stands, I do not believe that the Petitioner has presented adequate justifications for this age-based

classification to meet even minimal Constitutional scrutiny; this seems to be an attempt by the petitioner to compensate for the Pandora's box of shenanigans that could arise from removing other procedural safeguards (as noted above).

4. Creating A New License Class May Necessitate Additional Callsign Blocks

As noted by other comments, adding a new license class will likely result in a need for additional callsign blocks. In addition to the fact that the Commission is already burning through the 2x3 call sign blocks at a rapid pace (new systematically-issued calls in Call Districts 4 and 6 are already up to KN), it would be very useful to be able to identify "Tyro" operators by the format of their callsigns, for rule enforcement purposes. This is not so much an objection as to point out that this seems to be an item not considered by Mr. Hampton.

B. Objections to the Proposed Restructuring Of 70 Centimeter (440 MHz) Amateur Band

1. There is No Justification for Assigning 79 Repeater Channels on 70cm

Petitioner requests that a new sub-band be allocated in the 430-440 MHz range; specifically, 79 repeater inputs spaced every 12.5 kHz between 430.0 MHz and 431.0 MHz; 79 repeater outputs spaced every 12.5 kHz between 439.0 and 440.0 MHz; and 20 simplex channels spaced 12.5 kHz apart between 438.75 and 439.0 MHz.

Most of the 440 MHz to 450 MHz sub-band is already used for repeater operations, and there is already an extremely large number of 70 cm repeaters. According to repeaterbook.com, there are currently 157 "confirmed on-air" repeaters on the 70 cm band in the state of Tennessee alone. Across the entire nation, the number of repeaters is well into the thousands.

Additional repeater channels might be justifiable if all these repeaters were currently being used regularly. However, most of them are quiet most of the time (in my

personal experience as an operator in Middle Tennessee, there may be one or two repeaters on the 70 cm band where I would expect someone to reply to my "CQ").

I believe that hams in most parts of the United States would likely report a similar experience, based on conversations I have had with others.

Furthermore, there are currently eight repeater input-output pairs (Channels 15-22) on the GMRS band, and I almost never hear any traffic on them. While there are 1,421 repeaters listed by the myGMRS.com directory, I believe that many of those repeaters on not on-air. This suggests to me that assigning 2.25 MHz of the 70cm to a new "Tyro" sub-band would likely result in a lot of wasted spectrum.

2. The Proposed Allocation Would Negatively Impact Other Amateur Users

Currently, the 430 MHz spectrum is used for experimental and niche amateur operations. The specific sub-bands that Petitioner wants to allocate (430 – 431 MHz and 438.75 – 440 MHz) are used for Amateur Television. Although ATV appears to have declined somewhat in popularity, the ATV channels in the 70 cm band are particularly valuable because they nearly correspond to cable television channel frequencies 57-60. This coincidence makes getting into ATV much easier than it otherwise would be, because it means most off-the-shelf television sets can be repurposed as ATV receivers. The proposed allocations overlap directly with the 6 MHz footprint of NTSC signals on cable channels 58 and 60.

The 430-440 MHz spectrum is also home to other users in adjacent sub-bands which would be particularly negatively affected by FM users. The amateur satellite service uses a portion of 70 cm below the proposed "upper" allocation. Satellite users at, say, 435.8 MHz (the downlink frequency for Fuji Oscar-29) could suffer interference from intermodulation products if strong local signals at (say) 439 MHz and 442.8 MHz were present. Unlike terrestrial weak signal operations (which could adapt by changing

frequency), satellite frequencies are often fixed and require international coordination. The Commission should tread carefully when it comes to assigning spectrum that could affect these operations.

III. SPECIFIC POINTS OF AGREEMENT WITH MR. HAMPTON'S PETITION

I share Mr. Hampton's enthusiasm for radio communication, and I agree with him that it would be appropriate to designate scientific research as a purpose of the Amateur Radio Service. Furthermore, I believe that a limited set of inter-service interoperation channels to exist, both for emergency purposes and to facilitate more routine "ragchew" conversations.

IV. ALTERNATIVE PROPOSALS FOR INTER-SERVICE COMMUNICATION

A. Grant the Amateur Radio Service Secondary Privileges on GMRS/FRS Channels

Rather than bringing FRS and GMRS licensees to the ham bands, the Commission could opt to facilitate inter-service communication by bringing the hams to the FRS and GMRS bands.

Specifically, I propose allocating four GMRS channels (17, 18, 19 and 20) to the Amateur Service on a secondary basis. This would include both the repeater input and output frequencies. These channels are proposed because channels 17 and 20 are widely considered to be emergency and traveler channels, and because channels 18 and 19 appear to be relatively underused by the GMRS community (these are the two channels with the least number of repeaters indicated on myGMRS.com). As secondary users, amateurs would be required not to cause harmful interference to FRS/GMRS users.

Proposed Allocations to the Amateur Service

GMRS Channel	**Frequencies**	**Power Limit**	**Emissions Permitted**
17	462.600 MHz 467.600 MHz	50 watts output	A1D, F1D, G1D, H1D, J1D, R1D, A3E, F3E, G3E, H3E, J3E, R3E, F2D, and G2D (Everything permitted by 47 CFR § 95.1771(b))
18	462.625 MHz 467.625 MHz	50 watts output	*Same*
19	462.650 MHz 467.650 MHz	50 watts output	*Same*
20	462.675 MHz 467.675 MHz	50 watts output	*Same*

Amateur operators would be required to follow all amateur rules when using these channels under the terms of their amateur license. (If the operator also holds a GMRS license, s/he would have the option of choosing which rules to follow). This would include restrictions on commercial use while transmitting under amateur rules. See 97 CFR § 97.113.

Amateur operators would be limited on these channels to the same power and emission rules applied to the GMRS but would be exempt from having to use certified equipment per 47 CFR § 95.1761. This would allow the use of "homebrew" or modified commercial equipment, including repeaters, by amateurs.

Amateur operators would be explicitly permitted to communicate with non-amateurs on these five channels. Amateur operators would also explicitly be permitted to retransmit signals from non-amateurs on these five channels to other amateur bands provided the control operator is actively monitoring the content of the transmissions to ensure it is generally compatible with Amateur Service rules; this would create creating an exception to the non-retransmission rule in 47 CFR § 97.113(c).

B. Create A New Personal Radio Service On the 900 MHz ISM Band (Where the Amateur Service Already Has Secondary Privileges)

As an alternative, I propose that a new PRS band be created as a "secondary secondary" user at 915 MHz, with similar interoperation provisions as proposed above for the GMRS band. The 33 cm band is much larger and less-used than 70 cm and would be a good place to encourage experimentation and emergency communications.

Respectfully Submitted,

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